

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A copy protection method for digital media, the method comprising the steps of:

(a) encrypting an original media data set with a media key corresponding to a symmetric algorithm and encrypting said media key with a public key of a compliant playing device;

(b) delivering said media data set and media key encrypted in the step (a) and a media certificate to said playing device, said media certificate being required to recognize a valid private key among a plurality of private keys stored in said playing device and including a private-key identification and media identification of said playing device, said private-key identification being ~~encrypted~~ generated by encrypting the media identification with said public key of said playing device;

(c) decrypting said private-key identification;

(d) searching for an actual private key by checking whether each of stored private keys of said playing device corresponds to said decrypted private-key identification;

(e) decrypting said delivered media key with said actual private key; and

(f) decrypting said delivered media data set with said decrypted media key.

2. (Original) The method of claim 1, wherein said stored private keys include a current private key and one or more old private keys, each of said old private keys being previously revoked through a key revocation process.

3. (Original) The method of claim 2, wherein said playing device includes a rewritable memory storing said old private keys.

4. (Currently Amended) The method of claim 3, wherein said ~~older~~old private keys being stored in said memory are encrypted with said public key.

5. (Currently Amended) A copy protection system for digital media, the system comprising:

a private key verifier receiving a media certificate that includes a private-key identification of a compliant playing device and searching for an actual private key by checking whether each of available private keys of said playing device corresponds to said private-key identification, wherein said media certificate is required to recognize the actual private key among a plurality of private keys stored in said playing device;

a media key decryptor receiving an encrypted media key and decrypting said media key with said actual private key; and

a media data decryptor receiving an encrypted media data set and decrypting said media data set with said decrypted media key.

6. (Original) The system of claim 5, wherein said available private keys include a current private key and one or more old private keys, each of said old private keys being previously revoked through a key revocation process.

7. (Original) The system of claim 6, further comprising a data-rewritable memory storing said one or more old private keys.

8. (Currently Amended) The system of claim 7, where said ~~older~~ old private keys being stored in said memory are encrypted with a public key of said playing device.

9. (Original) The system of claim 5, wherein said encrypted media key is encrypted with a public key of said playing device.

10. (Original) The system of claim 5, wherein said encrypted media data set is encrypted with an original media key.

11. (New) A copy protection method for digital media, the method comprising:

(a) encrypting an original media data set with a media key and encrypting said media key with a public key of a compliant playing device;

(b) delivering the encrypted media data set, the encrypted media key, and a media certificate to said playing device, the media certificate being required to recognize a valid private key among a plurality of private keys stored in said playing device;

(c) identifying the valid private key among private keys stored in said playing device in response to said media certificate;

(d) decrypting said delivered media key with the valid private key identified as a result of the step (c); and

(e) decrypting said delivered media data set with said decrypted media key.

12. (New) The method of claim 11, wherein said stored private keys include a current private key and one or more old private keys, each of said old private keys being previously revoked through a key revocation process.

13. (New) The method of claim 11, further comprising:
not permitting a playback of the media data set when the valid private key is not identified as a result of step (c).

14. (New) A copy protection method for digital media, the method comprising:

(a) receiving an encrypted media data set, an encrypted media key and a media certificate, wherein the encrypted media set is generated by encrypting an original media data set with a media key, the encrypted media key is generated by encrypting said media key with a public key of a compliant playing device, and said media certificate is required to recognize a valid private key among a plurality of private keys stored in said playing device;

(b) identifying the valid private key among each of stored private keys of said playing device in response to said media certificate; and

(c) decrypting said received media key with the valid private key identified by the step (b), and decrypting said received media data set with said decrypted media key.

15. (New) The method of claim 14, wherein said stored, private keys include a current private key and one or more old private keys, each of said old private keys being previously revoked through a key revocation process.

16. (New) The method of claim 14, further comprising:
not permitting a playback of the media data set when the valid private
key is not identified as a result of step (b).